

WHAT IS CLAIMED IS:

1. A method of processing data packets, comprising the steps of:

receiving a series of data packets transmitted over a serial bus;

with respect to said series of data packets, taking the difference between a requested time of arrival written in a header portion and the cycle time at the time of reception, thereby deriving a relative value between said requested time of arrival and said cycle time; and

replacing said requested time of arrival with said relative value.

2. A method of processing data packets according to Claim 1, wherein said difference-taking step and said replacing step are skipped when said series of data packets is directed to a storage medium in which data storage is based on said cycle time, and are performed when said series of data packets is directed to a storage medium in which data storage is not based on said cycle time.

3. A method of processing data packets according to Claim 1, compatible with a plurality of data types including a series of data packets in which a header portion is given

to each of the data packets, and a series of data packets in which a header portion is given only to the data packet at the beginning thereof.

4. A video recording apparatus comprising:

means for receiving a series of data packets transmitted over a serial bus;

means for taking the difference between a requested time of arrival written in a header portion and the cycle time at the time of reception with respect to said series of data packets, thereby deriving a relative value between said requested time of arrival and said cycle time; and

means for replacing said requested time of arrival with said relative value.

5. A video recording apparatus according to Claim 4, wherein a dummy packet is generated in a range in which data is absent, and all the stream packets including the dummy packet are recorded so that the relative value between the requested time of arrival and the cycle time is obtained.

6. A method of processing data packets, comprising the steps of:

with respect to a series of data packets, taking the sum of a relative value, which is written in a header

portion, between a requested time of arrival and a cycle time at the time of reception, and a cycle time at the time of transmission;

replacing said relative value with said sum; and

transmitting said series of data packets over a serial bus.

7. A method of processing data packets according to Claim 6, wherein said sum-taking step and said replacing step are skipped when said series of data packets are fed from a storage medium in which data storage is based on said cycle time, and are performed when said series of data packets are fed from a storage medium in which data storage is not based on said cycle time.

8. A video playback apparatus comprising:

means for taking the sum of a relative value, which is written in a header portion, between a requested time of arrival and a cycle time at the time of reception, and a cycle time at the time of transmission with respect to a series of data packets;

means for replacing said relative value with said sum;

and

means for transmitting said series of data packets over a serial bus.

9. A video playback apparatus according to Claim 8, wherein said sum-taking means and said replacing means are disabled when said series of data packets are fed from a storage medium in which data storage is based on said cycle time, and are enabled when said series of data packets are fed from a storage medium in which data storage is not based on said cycle time.